



Tennessee Valley Authority, Post Office Box 2000, Spring City, Tennessee 37381-2000

AUG 05 2005

10 CFR 50.54(f)

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555-0001

Gentlemen:

In the Matter of) Docket No. 50-390
Tennessee Valley Authority)

WATTS BAR NUCLEAR PLANT (WBN) UNIT 1 - BULLETIN 2003-01
POTENTIAL IMPACT OF DEBRIS BLOCKAGE ON EMERGENCY SUMP
RECIRCULATION AT PRESSURIZED WATER REACTORS - REQUEST FOR
ADDITIONAL INFORMATION (RAI) (TAC NO. MB 9872)

The purpose of this letter is to respond to NRC's request for additional information concerning the subject bulletin responses dated August 8, 2003, April 6, 2004, and November 19, 2004. This RAI was received by electronic mail (e-mail) on June 3, 2005 from the NRC WBN Project Manager. TVA's responses were discussed in a teleconference call with NRC reviewer on June 10, 2005. In a July 11, 2005 e-mail, NRC requested TVA to supplement the Bulletin response as discussed in the teleconference call with NRC. The Enclosure provides the response to NRC's concerns.

There are no regulatory commitments associated with this submittal. If you have any questions concerning this matter, please call me at (423) 365-1824.

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I declare under penalty of perjury that the foregoing is true and correct. Executed on this 5th day of August, 2005.

Sincerely,



P. L. Pace
Manager, Site Licensing
and Industry Affairs

Enclosure

cc (Enclosure)

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ENCLOSURE

WATTS BAR NUCLEAR PLANT (WBN) UNIT 1 RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION BULLETIN 2003-01

The following provides TVA's responses to NRC's questions as understood from the June 10, 2005 teleconference call concerning TVA's response to the subject bulletin dated November 19, 2004. In a July 11, 2005 electronic mail NRC requested TVA to supplement the Bulletin response as discussed in the teleconference call with NRC.

NRC QUESTION 1

Does any procedural direction exist to refill the refueling water storage tank (RWST) after a plant went on recirculation, assuming no blocked sump?

TVA RESPONSE

Once the plant transitions to recirculation, it remains there for 3 hours. During this period, as during any extended loop activity, the operators review the lit annunciators and take the actions as specified in the Annunciator Response Procedures that can be taken in the existing plant condition. This would include Annunciator Response Instruction, ARI-124-130, for Annunciator 127-D, RWST LEVEL START MAKEUP. The actions for this annunciator direct the operators to initiate makeup to RWST. This is the procedural direction that would start RWST makeup without a blocked sump.

NRC QUESTION 2

Action 6 of page E-11 implies that more water would never be injected from the RWST to the sump.

TVA RESPONSE

At the end of the paragraph under Action 6, add: "However, the Technical Support Center guidance contains instructions to evaluate the need for RWST refill and allows water to be pumped from the refilled RWST by the emergency core cooling system (ECCS) pumps, with consideration of instrument flooding and containment integrity precautions associated with excessive containment flood level."

Procedural guidance is in place to initiate refill of the RWST with or without a blocked sump; however, current conditions would be considered prior to injecting additional water in containment. The Technical Support Center's

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evaluation would consider the containment water level at the time and the instrumentation relied upon above flood levels. To ensure containment integrity, containment pressure with the additional water would also be a consideration prior to injection.

NRC QUESTION 3

Supplement the response to the second question to verify that, following RWST injection and initiation of recirculation, control room operators have procedures in place to provide water to the reactor vessel from alternative sources of water outside of the RWST (i.e., RWST bypass lines).

TVA RESPONSE

Procedures for use of makeup sources of water once the preferred sources have been depleted are currently being developed. TVA had previously initiated a Problem Evaluation Report (PER) which identified that procedures were not in place for utilizing other water sources (i.e., high pressure fire protection water) as stated in the design system description for flood mode boration makeup system. These procedure revisions are being tracked by the PER.

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